

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings of claims in the application:

LISTING OF CLAIMS:

Claims 1-8 (cancelled)

9. (new) A method for charging a battery (16) from a direct-current source liable to significant fluctuations, comprising the steps of:

- converting the DC voltage from said direct-current source into a DC voltage which is higher than the voltage of said battery and is applied for progressively charging a storage capacitor (14),
- detecting a predetermined voltage threshold over the terminals of said storage capacitor (14), and
- discharging said storage capacitor (14) into said battery (16), said discharging being controlled by said threshold detection.

10. (new) The method of claim 9, implemented for charging a battery from a photovoltaic cells source.

11. (new) The method of claim 9, implemented for electrically supplying a lighting equipment for a vehicle, from a bicycle dynamo-electric generator.

12. (new) A device for charging a battery (16) from a direct-current source liable to significant fluctuations, implementing the method according to any of preceding claims, comprising:

- means (14) for storing capacitive energy,
- means (13) for converting the DC voltage from said direct-current source into a DC voltage which is higher than the voltage of said battery,
- means for progressively charging said capacitive storage means at said DC voltage provided by said converting means,
- means (17) for detecting a predetermined voltage threshold over the terminals of said capacitive storage means (14), and
- means (15) for discharging said capacitive storage means into said battery, said discharging means being controlled by said threshold detection means.

13. (new) The device of claim 12, characterized in that it further comprises filtering means (11) arranged between said direct-current source and said progressively-charging means (13).

14. (new) The device according to claim 12, characterized in that it further comprises means for adapting the predetermined voltage threshold at the terminals of said capacitive storage means (14), in function of the type of battery to be charged.

15. (new) The device according to claim 13, characterized in that it further comprises means for adapting the predetermined voltage threshold at the terminals of said capacitive storage means (14), in function of the type of battery to be charged.

16. (new) The device according to claim 14, characterized in that the threshold-adapting means comprise a commutable resistor (35a, 35b, 35c).

17. (new) The device according to claim 15, characterized in that the threshold-adapting means comprise a commutable resistor (35a, 35b, 35c).

18. (new) The device of claim 12, characterized in that the progressively-charging means (13) comprise inductive storage means (29) cooperating with controlled switching means (28).